plain statement of what is to be considered a fair standard of the normal, especially at the various stages at which specimens usually reach the pathologist and with the methods in current use. Instead of that, we are treated to an embryological study, and a very defective statement of what we see with the Weigert stain.

"Inspired by the character of the publication in which this work appears, we shall restrict ourselves to present by the means of drawings, copied as exactly as possible from nature, the facts of the structure of the spinal cord which seem to us best established and easiest to control." If this were taken in the sense spoken of above, Cajal might have given us more than a poor résumé of what every recent text book, or his older publications, give us fully as well.

After a short summary of the kinds of cells and fibres, and the principal generalities about the neuron, the first plate is explained, half a cross section of the spinal cord of a mouse, with the cell-bodies pink, their axons red, the collaterals black, and final arborizations green.

Plate II. is a study of the collaterals in the chick of 15 days' incubation, Plate III. gives the types of cells in a chick of 18 days, Plate IV. the substance of Rolando on the 10th day of incubation, Plate V. the same on the 19th day. On Plate VI. we find represented the neuroglia and nerve elements of the new-born dog. With Plate VII. we might come nearest the task of a normal histology included in an atlas of pathology. It gives a Weigert-Pal section of the cervical cord of the adult. It is difficult to realize how this drawing got into the atlas as a prototype of a normal cord section. The distribution of the cells hardly seems typical, and the distribution of the fibres in the white and gray matter is impossible, absolutely schematic—by mistake called, "copié aussi exactement que possible d'après naturé!" The distribution of thin and thick fibres, so easily made out in any decent preparation is absolutely ignored. The silence with which recent editions of text books pass over these points, is really remarkable. The study of marked degeneration and Golgi specimens seems to make anatomists overlook the number of things that can be seen in the normal adult cord with perfect ease.

With Plate VIII. we return again to the new-born mice and the chick for the study of the spinal and sympathetic ganglia.

That this volume should be so disappointing, in spite of the fact that it comes from the hands of the man to whom we are so deeply indebted for research work, might be suggestive of the hint that the student of pathology of the nervous system must make his own studies of the normal, and must know his problems better than the embryologist. It seems that there would be ample space in the literature for a normal histology applicable to the needs of the pathologist.

ADOLPH MEYER.

MONATSSCHRIFT FÜR PSYCHIATRIE UND NEUROLOGIE. Band I. Heft 1. Edited by Prof. C. Wernicke and Prof. Th. Ziehen.

The Monatsschrift für Psychiatrie und Neurologie takes at once first rank among the neurological journals of the world. There is an introduction of a few pages devoted to some of the questions of the day. In this attention is paid especially to Flechsig's theory of association centres.

Dr. Karl Bonhoeffer writes a long and carefully prepared paper, entitled, "Ein Beitrag zur Localisation der choreatischen Bewegungen" A Contribution to the Localization of Choreic Movements). He reports a case in which the symptoms were headache, vertigo, choreic movements chiefly in the right extremities and the right side of the face, ataxia, inability to stand or walk alone, great diminution of the patellar reflex, and paralysis of certain ocular muscles of late development, indicating some lesion near the oculomotor centre. There was no disturbance of motion and sensation, execpt for the sense of position. Death was due to erysipelas.

The pia was hyperæmic and a mild degree of internal hydrocephalus, probably due to the erysipelas, was noted. A very small carcinoma was found in the right first frontal convolution, which was not supposed to have produced symptoms, and another was found within the corpora quadrigemina. The primary tumor could not be located as a complete autopsy was not permitted. The anterior cerebellar peduncles at the decussation, as well as fibres of the formatio reticularis, were involved in the new growth. The oculomotor paralysis had probably been the result of pressure. The loss of the sense of position and the ataxia were attributed chiefly to the destruction of the fibres of the formatio reticularis, though the cerebellar type of the ataxia was supposed to depend on injury of the anterior cerebellar peduncles.

The most important statements which Bonhoeffer makes after a study of the reported cases of hemichorea are:

1. Hemichorea has not been observed in total hemiplegia.
2. Hemichoreic movements have never been observed as the result of irritation of the degenerating pyramidal tract in hemiplegia of cortical origin.
3. In subcortical lesions of the pyramidal tract hemichorea may only develop when a certain restoration of motor power has taken place.
4. Degeneration of the pyramidal fibres is not necessary for the development of hemichorea.
5. It has not been proven that irritation of the pyramidal tract has in any case produced choreic movements.
6. Lesions of the spinal cord and of the distal part of the oblongata never appear to cause choreic movements.
7. The hemichoreic movements are probably not due to lesion of the motor fibres (Kahler and Pick), but to lesion of a "cerebropetal" tract, as yet unknown, whose function it is to convey impulses necessary for the co-ordination of movement, from deeper portions of the cerebrum to the cortical motor region. It is probable that this tract is to be found within the anterior cerebellar peduncles, for in all cases of chorea which have been caused by focal lesions the fibres of these peduncles have been found injured, and in disease of the cerebellum choreic movements have been observed.

Following the paper by Dr. Bonhoeffer is one by Dr. Hermann Wilbrand, which has the title: "Ueber die Gesichtsfeldmessung am Dunkelperimeter (The Mensuration of the Visiual Field with the Dark Perimeter). The visual field is diminished concentrically for a short time when a person is brought into a darkened room, as the entire retina is less sensitive to light after exposure to diffuse daylight, and gradually becomes more sensitive in darkness. Everyone has experienced this dimness of vision in passing from light into darkness. By dark perimeter the author means the instrument used in the darkened room.

"Ueber die Beziehungen der Nervenzellen zu den Neurogliazellen anlässlich des Auffindens einer besonderen Zellform des Kleinhirns (The Relation of the Nerve Cells to the Neuroglia Cells in Reference to the Discovery of a Special Kind of Cell in the Cerebellum) is the title of an important paper from the pen of S. Ramón y Cajal, translated from the Revista trimestral micrografica.

If a section of the molecular layer of a rabbit's cerebellum is stained by the method of Nissl, many large, triangular or spindle-shaped cells may be seen in addition to the small stellate cells. These are arranged vertically and have large nuclei and two or three processes containing chromatin spindles. Numerous nuclei are found about the axis cylinder and lower part of the body of these cells, and are sometimes arranged in the form of a column. The lack of chromophilous protoplasm, the crowding together of these nuclei in a very limited space, which indicates a very delicate cell body, and the reticulated condition of the nucleoplasm cause Cajal to regard them as a variety of neuroglia cells. Similar nuclei are found about many of the pyramidal cells of the cerebrum, about certain spinal cells, about cells of the external geniculate body, and elsewhere. By their arrangement about the non-medullated portion of the axis cylinder where it joins the cell body they may prevent the escape of the nerve current and take the place of the nerve sheath.

Cajal believes that the large nerve cells of the molecular layer are displaced Golgi's cells, i. e., large cells of the granular layer whose cell body has wandered into the molecular layer.

A report of the congress for psychology in Munich is given by Liepmann, and one of the meetings of neurologists and alienists in Frankfurt on the Main, by H. Sachs.

The monthly ends with a notice of the death of the distinguished neurologist, Dr. Carl Eisenlohr, and a few book reviews. SPILLER.

THE DISEASES OF INFANCY AND CHILDHOOD, FOR THE USE OF STUDENTS AND PRACTITIONERS OF MEDICINE. By L. Emmett Holt, A.M., M.D., Professor of Diseases of Children in the New York Polyclinic, etc. With 204 illustrations, including seven colored plates. D. Appleton & Co., 1897.

The appearance of this new text-book on diseases of infancy and childhood was well-timed, for, in spite of improved editions and of some excellent qualities, the older text-books on Pediatrics, published in England and in America, had become antiquated.

Dr. Holt's book is nothing if not up to date. His views on infant feeding, on bacteriology, and on pathology are of the latest. Sometimes we fear that the latest authorities have been considered too carefully, while the work of preceding authors has been disregarded. To mention but one instance: On the subject of aphasia, Wyllie's work is quoted, and scarcely another, although it will be conceded that the thoroughly original work in aphasia in children has been done by Kussmaul, Bernhardt, and others, and not by Wyllie; but as long as the student thus gets the benefit of the latest summary, there is not sufficient reason to find fault with the author's methods.

On the whole the book makes an excellent impression: The subject matter is well arranged, the chapters are carefully written, the illustrations are beyond praise, and there is that close relationship between clinical descriptions and pathologico-anatomical observations, which proves that the author has as much respect for the science as for the art of medicine.

Diseases of the nervous system are treated in Section VII., consisting of about 144 pages, and a few in addition are devoted to birth paralyses in the discussion of the diseases of the newly-born. Every author is entitled, in our opinion, to divide up his work as he thinks best, and, granting that Dr. Holt was right in limiting the number of pages to be devoted to nervous diseases, we hasten to add that he has presented the subject, within such limits, carefully and accurately. The author followed in the foot-steps of other writers who have begun with functional diseases and have then passed to the consideration of organic diseases of the brain and spinal cord. In this instance diseases of the spinal cord and of the peripheral nerves are treated after diseases of the brain.